Autonomous Defense Node (ADN) – Whitepaper v1

1. Introduction

The DigiByte Autonomous Defense Node (ADN) represents the third layer of the Majewski Defense Architecture, combining Sentinel AI + DQSNet + ADN into a unified self-defending security stack for DigiByte.

2. Purpose

ADN detects, predicts, and responds autonomously to node-level, network-level, and quantum-level threats in real time.

3. Architecture

- Autonomous Runtime Engine

- Node Health Intelligence

- Quantum Shield Integration (DQSNet)

- Sentinel AI Behavioral Layer

- Zero-Trust Reflex Engine

- Distributed Mesh Optional Layer

4. Defense Levels

normal → elevated → high → critical

5. Threat Sources

- Quantum-assisted signature harvesting

- RNG degradation attacks

- Reorg sequences

- Cross-chain signature correlation

- Timestamp manipulation

- AI-assisted private key extraction attempts

6. Vision

ADN transforms DigiByte into a self-healing digital organism — secure by autonomy, resilient by intelligence.